

**Before the  
Federal Communications Commission  
Washington, D.C.**

**May 28, 2004**

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| In the Matter of    | ) |                     |
|                     | ) |                     |
| IP-Enabled Services | ) | WC Docket No. 04-36 |
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**COMMENTS OF THE AMERICAN FOUNDATION FOR THE BLIND**

**SUMMARY**

The American Foundation for the Blind (“AFB”) is pleased to submit comments in the above-captioned proceeding.

We commend the Commission for including in this Notice of Proposed Rulemaking a broad examination of issues relating to services and applications making use of Internet Protocol (IP), including *but not limited to* (emphasis added) voice over IP (VoIP) services (collectively, “IP-enabled services”). We encourage the Commission to retain this inclusive approach and set forth clear requirements for accessibility in the design, development and implementation of IP enabled communications and services.

In our comments filed in response to the Section 255 proceeding we noted:

In order to ensure that accessibility is achieved, the Commission needs to make it clear that it will read the terms “telecommunications services, telecommunications equipment, and customer premises equipment” broadly functionally. AFB is concerned that companies now building the most advanced products and networks—especially those based on such as packet switching—will not take steps required to make those network features and products fully accessible unless the Commission ensures functional parity and technology neutrality.<sup>1</sup>

Similarly, we addressed these concerns in our comments in the Section 255 Notice of Further Inquiry where we stated:

As communications technologies converge, strict adherence to the legacy treatment of these distinctions do not reflect the way we communicate.<sup>2</sup>

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<sup>1</sup> AFB comments, Section 255 Notice of Proposed Rulemaking

<sup>2</sup> AFB comments Section 255 Notice of Further Inquire para.4

Voluntary measures and market-based approaches have not, and will not, ensure reliable access to IP-enabled communication for people with disabilities. Thus, the proper role for the Commission is to establish enforceable requirements that ensure a reliable opportunity for equal access for people with disabilities.

We urge the Commission to take this historic moment to construct a regulatory approach that meets the needs of consumers with disabilities rather than trying to shoehorn our needs into the unrelated legacy regulatory regimes that now govern our communications infrastructure. In fact, the current panoply of economic-based regulations and the telecommunication/information division are not well suited to address the specific access needs of individuals with functional limitations.

The Commission should adopt a regulatory approach that is based on the function rather than the form or platform of communication technologies. Clearly, the development of new IP-enabled services such as instant messaging, streaming media, including “innumerable opportunities for innovative offerings competing with one another over multiple platforms and accessible wherever the user might have access to the IP network,”<sup>3</sup> will need to be addressed by the Commission if the promise of this new technology will be delivered to millions of blind and visually impaired people at home, in school, at work, and in leisure. The IP-enabled network allows very low cost video conferencing, direct low cost calls through peer to peer connections with no central network, distance learning and in-service training opportunities wherever one can connect with the Internet. But with legacy definitions restricting the application of Section 255, our experience tells us that the needs of people who are blind or visually impaired, in fact all persons with disabilities, will be ignored by the developers of these new technologies or addressed as afterthoughts, through incomplete access and retrofit solutions.

## **INTRODUCTION**

AFB responded to the Notice of Inquiry regarding Section 255’s applicability in the context of “Internet Telephony” and “computer based equipment that replicates telecommunications functionality” and is pleased [to] respond to the Commission’s request to refresh the record compiled in response to this Notice of Inquiry. We are particularly pleased to address questions related to both “IP-telephony” and “Other IP-enabled” services because of the extraordinary potential opportunity that these services offer for people who are blind or visually impaired. Conversely, failure by the Commission to properly address access to this new communications infrastructure will result in severe and insurmountable barriers to access.

The mission of the American Foundation for the Blind is to enable persons who are blind or visually impaired to achieve equality of access and opportunity in all aspects of society. AFB accomplishes this mission, in part, by taking a national leadership role in the development and implementation of public policy and legislation.

AFB's long-standing interest in the potential of communications technologies dates back to 1924 when Robert Irwin, AFB Executive Director began to look for a method to improve the production of audio "talking" books. These efforts eventually resulted in the development of the

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<sup>3</sup> NPRM, para.2

33 1/3 RPM phonograph record, followed by the creation of our "Talking Book" production studio, and ultimately, the government-supported Books for the Blind and Physically Handicapped program of the Library of Congress. Building on that experience, AFB fully appreciates that access for people who are blind or visually impaired is best ensured if it is considered at the nascent stage of technology development. Our experience with early recording technology demonstrates that it is far easier and far more cost effective to support accessibility when technologies are conceived and developed. IP-enabled communication technologies are in this early stage of development and this is exactly the right time to ensure that technological protocols and governmental policies are developed in a manner that supports accessibility. Failure to act now will almost certainly ensure that people with disabilities will be left behind, denied full access to the power of new communications technologies.

Indeed, we were most gratified to hear Chairman Powell's remarks at the May 7 Disability Solutions Summit for IP-Enabled Technology. Speaking "from my experience and from my heart," Chairman Powell said "there has been "always the same criticism and problem about policy approach to disability issues - it's always been retrofitted. It's always bolted on at the end. And it's always twice as difficult, because it's been thought of at the end, after investments have been made, choices have been made, policies have been developed.

We hope the Commission will keep those thoughts uppermost while developing an order based on this record. We take this opportunity to demonstrate our strong interest in these proceedings and provide these comments to the Commission concerning IP-enabled technologies in the hope that we can help bring about full and equal opportunity for access to these critical new communications technologies for individuals who are blind or visually impaired.

We appreciate the effort made by the Commission to outline the complex issues presented by the rapid deployment of IP-enabled services including VoIP. The depth and breadth of the NPRM review and the quality of the analysis clearly outline the challenges before the Commission. However, we must remind the Commission that persons with disabilities and most certainly persons who are blind or visually impaired already face daunting challenges as they undertake a day to day struggle to gain independent access to information through communications equipment and services. The promise of accessibility, even for legacy equipment and services remains largely unfulfilled. It is within the power of the Commission to remove some of those obstacles by setting forth clear and unambiguous requirements for accessible IP-enabled services.

### **Voluntary Measures and Market Forces Are Not Sufficient to Ensure Accessibility**

Eight years of experience with Section 255 along with years of experience leading up to the Telecommunications Act of 1996 gives us no cause for optimism that so-called market forces will afford access to the IP based telecommunications revolution. There are several reasons for this. First, people with disabilities simply do not have sufficiently focused power in the market place, that is, the power necessary to negotiate rates, terms, and conditions that affect access to services. Access by persons with disabilities depends on sound regulation and consistent enforcement. Dr. Gregg Vanderheiden made this point quite eloquently during the course of the May 7 Disability Solutions Forum:

Often, when there is even talk of regulation, there is action. But if that talk goes away the action goes away—and accessibility groups and task forces within companies have repeatedly been disbanded when regulations failed to appear or when regulations failed to be enforced.<sup>4</sup>

## **SECTION 255 AND ACCESS TO IP-ENABLED SERVICES**

The enactment of Section 255 and the Report and Order implementing the statutory requirements constitutes a useful starting point for consideration of access to IP enabled communications. It addresses the needs of consumers by establishing requirements for accessible equipment and services. The Comprehensive user interface standards that have been established for implementing Section 255 address the human interface with communications technologies. Those access standards created for equipment and services are flexible precisely because they address the needs of individuals with specific communication-related disabilities to access and use communications technologies. Thus, these access approaches could work equally well in ensuring the accessibility of a softphone, as well as the equipment that facilitates communications of electronic text, video and other content made possible with IP-enabled services.

But, 255 is limited by its application to telecommunications and frankly, by neglect in enforcement by the Commission. Unfortunately, our hopes have not been realized, but its breadth and approach remains right.

While this Notice presents complex questions regarding possible future frameworks for the regulation of IP-enabled services, the accessibility problems faced by people who are blind or vision impaired are strikingly similar to those which Section 255 has attempted to address. Regardless of the regulatory regime chosen, a person who is blind or vision impaired needs to be able to purchase equipment and services, hook up that equipment, and make it work. Section 255 provides a carefully constructed basis for defining equipment and services and implementing accessibility.

In addition, Section 255 provides a basis for refreshing access guidelines for equipment and services which might be brought under a new regulatory regime. Section 255 states that “the Board shall develop guidelines for equipment in conjunction with the Commission and that the Board shall review and update the guidelines periodically. The original guidelines were the product of extended comment among the industry and the disability community. It would certainly be within the present authority of the Commission to begin a timely review and update process once the regulatory structure for the IP-enabled regime is established.

## **THE COMMISSION HAS THE AUTHORITY TO REGULATE IP-ENABLED SERVICES UNDER TITLE I**

Ancillary jurisdiction provides the regulatory edifice on which to build a 255-like approach to broadly ensure access to communications technologies and networks, including IP-enabled communication.

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<sup>4</sup> Remarks delivered at FCC Disability Solutions Summit Panel III Impact of IP-Enabled Services Regulation on Accessibility Issues, May 7, 2004.

In fact, the Commission asserted this authority in the 255 proceeding in a manner quite relevant to this Notice when it concluded that two information services – interactive voice response systems and voice mail – were essential to the completion of the communications under the scope of Section 255.

## **COMMISSION RULES SHOULD INCLUDE THE FULL RANGE OF IP-ENABLED EQUIPMENT AND SERVICES**

Even dating back to the time of the Section 255 Notice of Proposed Rulemaking and its Further Notice of Inquiry, AFB took note of the problems inherent in resolving Section 255 jurisdiction based on legacy regulatory treatment and definitions of telecommunications equipment and services when we stated:

AFB urges the Commission to rethink its legacy treatment of information services, from *computer II* to the present day, than an enhanced service is “any offering over the telecommunications network which is more than a basic transmission service. As more and more telecommunications services become computer-based and converge, the Commission must look to the functionality of the service in question to determine whether to apply Section 255 protections.”<sup>5</sup>

In the provision of voice telephone service over the Internet there are specific access issues for people who are blind or visually impaired. For example, there is no requirement that a VoIP sign up process be accessible for an individual using a screen-reader to manage account set up. We note that the Commission has stated in this NPRM that:

While we adopt no formal definition of “VoIP” we use the term generally to include any IP-enabled services offering real-time, multidirectional voice functionality, including but not limited to, services that mimic traditional telephony.<sup>6</sup>

At the same time the Commission states that:

....IP-enabled services can be created by users, or third parties providing innumerable opportunities for innovative offerings competing with one another over multiple platforms and accessible wherever the user might have access to the IP network.<sup>7</sup>

The Commission expands this point in stating:

Indeed, while a century of PSTN development has given rise to relatively few opportunities for user customization, a mere decade of widespread commercial use has produced a dizzying array of IP-enabled services, ranging from presence management to multimedia conferencing.

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<sup>5</sup> AFB response to Section 255 Notice of Further Inquiry, para 11.

<sup>6</sup> FCC NPRM footnote 7

<sup>7</sup> FCC NPRM para. 6

The example of “presence management” illustrates our concern with restricting Section 255 reach to VoIP services and not expanding Section 255 to the full panoply of IP-enabled services. Presence management allows a user’s presence to be dynamically detected in a range of networks so that an agent can act as a personal communications manager as the user interacts with multiple communications devices across multiple networks and can remain in touch using an increasing range of devices and networks with a capability to detect and receive information in the device or network of choice.<sup>8</sup>

Section 255’s reach into such a system would be severely restricted by legacy definitions of both telecommunications equipment and services and access would be further hindered in a regime which ignores the ability of IP-enabled services to move well beyond a voice functionality approach making distinctions between “voice” service and “data” service.

## **SECTION 255 DEFINITIONS SHOULD MATCH THE NEW IP-ENABLED REGIME**

AFB’s comments in response to the Section 255 Notice of Proposed Rulemaking asked that the Commission take a more expansive reading of the key terms in Section 255. We feel very strongly that the advent of IP-enabled equipment and services now make it imperative that the Commission take the view originally suggested in our response:

In order to ensure that accessibility is achieved, the Commission needs to make it clear that it will read the terms “telecommunications services,” “telecommunications equipment,” and “customer premises” equipment broadly and functionally. AFB is concerned that companies that are now building the most advanced products and networks – especially those based on such as packet-switching – will not take the steps required to make these network features and products fully accessible unless the Commission ensures functional parity and technology neutrality.<sup>9</sup>

## **NETWORK FEATURES, FUNCTIONS AND CAPABILITIES**

In this proceeding the Commission poses a number of thoughtful potential constructs with respect to responsibilities and definitions of service providers. The most dense speculation is reserved to the configuration of networks and applicability of legacy regulatory structures to the networks. As the Commission works to resolve these issues, we draw its attention to Section 251 of the Telecommunications Act of 1996 as it relates to network features, functions, and capabilities. We strongly recommend that the Commission ensure that as carriers implement new services these carriers are reminded to exercise due diligence to follow the directives of Section 251(a)(2) which prohibits the telecommunications carrier from installing “network features, functions, and capabilities that do not comply with the guidelines and standards established pursuant to Section 255.”

The convergence of technologies and the shift to new platforms makes it essential for the Commission to establish rules for a “due diligence” process that ensures that providers of IP-enabled services and equipment can meet the access needs of people with disabilities. The need for

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<sup>8</sup> Unified Network Presence Management, Nortel Networks White Paper copyright 2000 (abstract)

<sup>9</sup> AFB Comments on WT Docket No.96-198

accessible communications networks should not be restricted by the type of message being communicated, the network(s) over which it travels, the device used to transmit or receive the communication, or the location or method of attaching that device to the network.

Individuals with disabilities must have an independent means to:

- Operate controls;
- Verify status of messages;
- Choose among "Menu" options;
- Transform content to make it accessible;
- Transmit and receive content independently, free from interference or harm caused by network protocols or design;

## **COMPLAINT PROCESSES IN THE IP-ENABLED REGIME**

We registered significant concerns regarding this process in the course of our comments on the Section 255 Notice of Proposed Rule-Making. We outline these concerns again because they were not adequately addressed in the final Report and Order. The most serious concern remains that almost all of the information critical to resolving the complaint will reside in the control of the company that has allegedly failed to provide accessible service or equipment. Unfortunately there is still no requirement that companies maintain records sufficient to show that accessibility issues are being addressed. The Commission should take steps to ensure that regardless of the regulatory regime it enacts, that records of accessibility efforts are documented and available.

## **CONCLUSION**

We look forward to a communications environment in which people with disabilities can effectively share in the Four Freedoms outlined by Chairman Powell at the University of Colorado at Boulder:

1. Freedom of Access to Content: Consumers should have access to their choice of legal content.
2. Freedom to Use Applications: Consumers should be able to run applications of their choice.
3. Freedom to Attach Personal Devices: Consumers should be permitted to attach any device they choose to the connection in their homes.
4. Freedom to obtain Service Plan Information: Consumers should receive meaningful information regarding their service plan.

The wide-range of examples which the Commission cites in these proceedings offer clear evidence that IP-enabled technologies will, in very short order, command the largest and most significant share of the communications territory. The legacy communications covered by Section 255 will, absent the more expansive interpretations which we recommend, leave people who are blind or visually impaired with a connection to a rapidly receding enclave, unable to select equipment and services best suited to their needs and circumstances.

Respectfully Submitted:

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